Approved for use through 07/31/2006. OMB 0651-0032

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UTILITY PATENT APPLICATION TRANSMITTAL

(Only for new nonprovisional applications under 37 CFR 1.53(b))

Attorney Docket No.	NOVAM40531	
First Inventor	Ledden	
Title	METHODS FOR TRANSMIT EXCITATI IN MAGNETIC RESONANCE IMAGING	
Express Mail Label No.	EV402171882US	

APPLICATION ELEMENTS See MPEP chapter 600 concerning utility patent application contents.	ADDRESS TO: Mail Stop Patent Application Commissioner for Patents P.O. Box 1450 Alexandria VA 22313-1450								
1. Fee Transmittal Form (e.g., PTO/SB/17) (Submit an original and a duplicate for fee processing) Applicant claims small entity status. See 37 CFR 1.27. 3. Specification [Total Pages 31] (preferred arrangement set forth below) - Descriptive title of the invention - Cross Reference to Related Applications - Statement Regarding Fed sponsored R & D - Reference to sequence listing, a table, or a computer program listing appendix - Background of the Invention - Brief Summary of the Invention - Brief Description of the Drawings (if filed) - Detailed Description - Claim(s) - Abstract of the Disclosure	7. CD-ROM or CD-R in duplicate, large table or Computer Program (Appendix) 8. Nucleotide and/or Amino Acid Sequence Submission (if applicable, all necessary) a. Computer Readable Form (CRF) b. Specification Sequence Listing on: i. CD-ROM or CD-R (2 copies); or ii. Paper c. Statements verifying identity of above copies ACCOMPANYING APPLICATION PARTS 9. Assignment Papers (cover sheet & document(s)) 10. 37 CFR 3.73(b) Statement Power of								
5. Oath or Declaration [Total Sheets 2] a. X Newly executed (original or copy)	(when there is an assignee) Attorney 11. English Translation Document (if applicable) 12. Information Disclosure Copies of IDS Statement (IDS)/PTO-1449 Citations								
b. Copy from a prior application (37 CFR 1.63(d)) (for continuation/divisional with Box 18 completed)	13. Preliminary Amendment 14. Return Receipt Postcard (MPEP 503)								
i. DELETION OF INVENTOR(S) Signed statement attached deleting inventor(s) name in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b). 6. Application Data Sheet. See 37 CFR 1.76	(Should be specifically itemized) 15. Certified Copy of Priority Document(s) (if foreign priority is claimed) 16. Monpublication Request under 35 U.S.C. 122 (b)(2)(B)(i). Applicant must attach form PTO/SB/35 or its equivalent. Other: Disclosure Document retention request								
18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in the first sentence of the specification following the title, or in an Application Data Sheet under 37 CFR 1.76:									
Continuation Divisional Continuation-in-part (CIP) of prior application No.:									
Prior application information: Examiner For CONTINUATION OF DIVISIONAL APPS only; The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.									
19. CORRESPONDENCE ADDRESS									
Customer Number: 02158	OR Correspondence address below								
Name									
Address									
City	State Zip Code								
Country	elephone Fax								
Name (Print/Type) Steven K. Mantin O Registration No. (Attomey/Agent) 38,542									
Signature	Date 11/20/2003								

This collection of information is required by 37 CFR 1.53(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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SUBTOTAL (3)

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FEE TRANS	•					Complete if Known	
FEE IRANS	IVIIIIA	-	Application Number			ber	
for FY 2004				Date			
		First Named Inventor			entor Ledden		
Effective 10/01/2003. Patent fees are sub	oject to annual revision.		Examiner Name			•	
Applicant claims small entity status. S	See 37 CFR 1.27		Art U	nit			
TOTAL AMOUNT OF PAYMENT	(\$) 425				cket N	No. NOVAM40531	丿
METHOD OF PAYMENT (check		FEE CALCULATION (continued)					
Check Credit card Money Order Deposit Account: Deposit Account Number Deposit Account Account Account Account Account Name	Fee Code 1051 1052	(\$) 130 50	Smal Fee Code 2051 2052	Fee (\$) 65 25	Fee Description Surcharge - late filing fee or oath Surcharge - late provisional filing fee or cover sheet		
The Director is authorized to: (check all that ap X Charge fee(s) indicated below X Cred Charge any additional fee(s) or any underpay Charge fee(s) indicated below, except for the to the above-identified deposit account.	1804	2,520	1804	920*	• •		
FEE CALCULATION	1251		2251	55		4	
1. BASIC FILING FEE Large Entity Fee Fee Fee Fee Fee Code (\$) 1001 770 2001 385 Utility filing fee	Fee Paid			2252 2253 2254 2255	475 740	5 Extension for reply within third month	

		I 385 I						l I
1002 340	2002 170	Design filing fee	1401	330	2401	165	Notice of Appeal	· ·
1003 530	2003 265	Plant filing fee	1402	330	2402	165	Filing a brief in support of an appeal	
1004 770	2004 385	Reissue filing fee	1403	290	2403	145	Request for oral hearing	
1005 160	2005 80	Provisional filing fee .	1451	1,510	1451	1,510	Petition to institute a public use proceeding	
	l	SUBTOTAL (1) (\$) 385	1452	110	2452	55	Petition to revive - unavoidable	
2 FYTDA	CL AIM EE	ES FOR UTILITY AND REISSUE	1453	1,330	2453	665	Petition to revive - unintentional	
Z. LATINA	CLAIMIT	Fee from	1501	1,330	2501	665	Utility issue fee (or reissue)	
Tatal Olahara	111	Extra Claims below Fee Paid	1502	480	2502	240	Design issue fee	
Total Claims Independent		20** = 0 X 9 = 0	1503	640	2503	320	Plant issue fee	
Claims		3** = 0 x 43 = 0	1460	130	1460	130	Petitions to the Commissioner	
Multiple Depe		L =	1807	50	1807	50	Processing fee under 37 CFR 1.17(q)	
Large Entity Fee Fee	Small Ent		1806	180	1806	180	Submission of Information Disclosure Stmt	
Code (\$)	Code (\$)	8021	40	8021	40	Recording each patent assignment per property (times number of properties)	40
1202 18 1201 86	2202 2201	9 Claims in excess of 2043 Independent claims in excess of 3	1809	770	2809		Filing a submission after final rejection (37 CFR 1.129(a))	
1203 290	2203	145 Multiple dependent claim, if not paid	1810	770	2810	385	For each additional invention to be	
1204 86	2204	43. ** Reissue independent claims					examined (37 CFR 1.129(b))	<u> </u>
	over original patent		1801	770	2801	385	Request for Continued Examination (RCE)	
1205 18	2205	9 ** Reissue claims in excess of 20 and over original patent	1802	900	1802	900	Request for expedited examination of a design application	

SUBMITTED BY						(Complete (if applicable))			
Name (Print/Type)	Steven	K. Ma	artin	. ^	Λ.	Registration No. (Attorney/Agent)	38,542	Telephone	617-523-3515
Signature	V	<u>~</u>	9	No	X .~			Date	11/20/2003

Other fee (specify) ___

*Reduced by Basic Filing Fee Paid

WARNING: Information on this form may become public. Credit card information should not be included on this f rm. Pr vide credit card information and authorization on PTO-2038.

This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

SUBTOTAL (2)

**or number previously paid, if greater; For Reissues, see above

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REQUEST AND CERTIFICATION UNDER 35 U.S.C. 122(b)(2)(B)(i)

First	Named Inventor	Ledden			
Title METHODS FOR TRANSMIT EXCITATION IN MAGNETIC RESONANCE IMAGING					
Atty [Docket Number	NOVAM40531			

I hereby certify that the invention disclosed in the attached application has not and will not be the subject of an application filed in another country, or under a multilateral agreement, that requires publication at eighteen months after filing. I hereby request that the attached application not be published under 35 U.S.C. 122(b).

11/20/2003

Date

Signature

Steven K. Martin

Typed or printed name

This request must be signed in compliance with 37 CFR 1.33(b) and submitted with the application **upon filing**.

Applicant may rescind this nonpublication request at any time. If applicant rescinds a request that an application not be published under 35 U.S.C. 122(b), the application will be scheduled for publication at eighteen months from the earliest claimed filing date for which a benefit is claimed.

If applicant subsequently files an application directed to the invention disclosed in the attached application in another country, or under a multilateral international agreement, that requires publication of applications eighteen months after filing, the applicant must notify the United States Patent and Trademark Office of such filing within forty-five (45) days after the date of the filing of such foreign or international application. Failure to do so will result in abandonment of this application (35 U.S.C. 122(b)(2)(B)(iii)).

Burden Hour Statement: This collection of information is required by 37 CFR 1.213(a). The information is used by the public to request that an application not be published under 35 U.S.C. 122(b) (and the PTO to process that request). Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This form is estimated to take 6 minutes to complete. This time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Attorney Docket: NOVAM40531

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:

Ledden

Title:

METHODS FOR TRANSMIT EXCITATION IN MAGNETIC RESONANCE IMAGING USING A TRANSMIT PULSE WITH

TIME VARYING SPATIAL CHARACTERISTICS

Boston, Massachusetts
Date: November 20, 2003

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

RETENTION OF DISCLOSURE DOCUMENT

Please retain the following Disclosure Document beyond the normal two-year period:

Title: Uniform Transmit Excitation System for High Field MRI Scanners

Number: 519272

Date of Receipt: October 4, 2002

This Disclosure Document is related to the patent application enclosed herewith.

Respectfully submitted, ALTMAN & MARTIN

- Steven K. Martin

Registration No. 38,542